

REMARKS

The present Amendment amends claims 11-13. Therefore, the present application has pending claims 11-13.

Claims 11-13 stand rejected under 35 USC §103(a) as being unpatentable over Tiernan (U.S. Patent No. 6,172,988) in view of Northcutt (U.S. Patent No. 6,185,737). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now recited in claims 11-13 are not taught or suggested by Tiernan or Northcutt whether taken individually or in combination with each other as suggested by the Examiner.

Amendments were made to the claims so as to more clearly recite that the present invention is directed to a layer-coded data transmitting apparatus for transmitting layer-coded data in a single channel including converting means for converting layer-coded data belonging to each of a plurality of layers of an elementary stream (ES) to packetized elementary stream (PS) data, first packetizing means for packetizing the PES data to a realtime protocol (RTP) packet for each layer data, and second packetizing means for packetizing the RTP packet to a user data gram protocol (UDP) packet for layer data. According to the present invention the converter means inserts an identifier indicating a species of ES to the PS packet and converts the ES data according to the identifier so that only the ES data belonging the same layer is contained in a single PS packet which transmits an ES data. Further, according to the present invention the first packetizing means divides the PS packet belonging the same layer into a plurality of RTP packet each of which includes the divided PS packet data and a RTP header next to the divided PS packet

so that the length of the RTP packet is not more than a maximum length in which the UDP packet is transmittable and the second packetizing means packetizes the RTP packet so that only the RTP packet data belongs to the same layer is contained in a single UDP packet.

The above described features of the present invention particularly with regards to the converting means inserting an identifier indicating a species of ES to the PS packet and converting the ES data according to the identifier so that only ES data belonging the same layer is contained in a single PS packet which transmits an ES data are described, for example, on page 6, lines 8-17 and from page 12, line 25 through page 20, line 14 of the present application.

The above described features of the present invention now more clearly recited in the claims are not taught or suggested by Tiernan or Northcutt whether taken individually or in combination with each other as suggested by the Examiner.

Tiernan teaches a method for supplying arbitrary types of information in a digital signal format to MPEP 2 systems. Particularly, Tiernan teaches in Fig. 8 and in col. 9, lines 30-37 the converting of an ES packet into a PES packet and into IP packets. Further, Tiernan teaches in Fig. 1, col. 5, line 56 through col. 6, line 4 the packetizing of a plurality of ES packet into respective PES packets.

However, Tiernan fails to teach or suggest how to segmentized ES data into IP packets. Particularly, in Tiernan each of a plurality of ES packets are merely converted into PES packets. Contrary to the teachings in Tiernan according to the present invention PES packets are generated from ES packets on a species (e.g.,

importance level) of ES data basis by segmentizing the ES data according to the species of the ES data.

Thus, Tiernan fails to teach or suggest a layer-coded data transmission apparatus for transmitting layer-coded data in a single channel including a converter means, first packetizing means and second packetizing means wherein the converting means inserts an identifier indicating a species of ES to the PES packet and converts the ES data according to the identifier so that only ES data belonging to the same layer is contained in a single PES packet which transmits an ES data as recited in the claims.

The above noted deficiencies of Tiernan are not supplied by Northcutt. Therefore, combining the teachings of Tiernan and Northcutt in the manner suggested by the Examiner still fails to teach or suggest the features of the present invention as now more clearly recited in the claims.

Northcutt teaches a method and apparatus for providing multi-media network interface. The Examiner relies upon Northcutt for an alleged teaching of encapsulating information to RTP/UDP/IP for transport over an IP network. However, this teaching of Northcutt does not supply any of the deficiencies noted above with respect to Tiernan.

Particularly, Northcutt fails to teach or suggest a layer-coded data transmitting apparatus for transmitting layer-coded data in a single channel including converting means, first packetizing means and second packetizing means wherein the converting means insert an identifier indicating a species of ES to the PES packet and converts the ES data according to the identifier so that only ES data belonging

to the same layer is contained in a single PES packet which transmits an ES data as
recited in the claims.

Thus, combining the teachings of Tiernan and Northcutt in the manner suggested by the Examiner still fails to teach or suggest the features of the present invention as now more clearly recited in the claims. Therefore, reconsideration and withdrawal of the 35 USC §103(a) rejection of claims 11-13 as being unpatentable over Tiernan and Northcutt is respectfully requested.

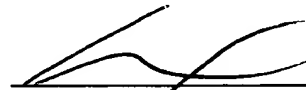
The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references utilized in the rejection of claims 11-13.

In view of the foregoing amendments and remarks, Applicants submit that claims 11-13 are in condition for allowance. Accordingly, early allowance of claims 11-13 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (500.37418CX1).

Respectfully submitted,

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